
Human MIP-3 α /CCL20 ELISA Kit

产品编号: bsk11084

种属: Human

线性范围: 15.60 - 1,000 pg/mL

应用范围: S/P/CC

检测限: 7 pg/mL

适用样品基质: cell culture supernates, serum, and plasma.

保存条件: Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles (Shipped with wet ice.).

产品介绍: Chemokine (C-C motif) ligand 20 (CCL20) or liver activation regulated chemokine (LARC) or Macrophage Inflammatory Protein-3 (MIP3A) is a small cytokine belonging to the CC chemokine family. It is strongly chemotactic for lymphocytes and weakly attracts neutrophils. CCL20 is implicated in the formation and function of mucosal lymphoid tissues via chemoattraction of lymphocytes and dendritic cells towards the epithelial cells surrounding these tissues. CCL20 elicits its effects on its target cells by binding and activating the chemokine receptor CCR6. Recent research in an animal model of multiple sclerosis known as experimental autoimmune encephalitis (EAE) demonstrated that regional neural activation can create "gates" for pathogenic CD4⁺ T cells to enter the CNS by increasing CCL20 expression, especially at L5. Sensory nerve stimulation, elicited by using muscles in the leg or electrical stimulation as in Arima et al., 2012, activates sympathetic neurons whose axons run through the dorsal root ganglia containing cell bodies of the stimulated afferent sensory nerve. Sympathetic neuronal activity activates IL-6 amplifier resulting in increased regional CCL20 expression and subsequent pathogenic CD4⁺ T cell accumulation at the same spinal cord level. CCL20 expression was observed to be dependent on IL-6 amplifier activation, which is dependent on NF- κ B and STAT3 activation. This research provides evidence for a critical role for CCL20 in autoimmune pathogenesis of the central nervous system.